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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,619	10/02/2000	Gregg Motsenbocker	25963-656	4452
24961 75	590 05/08/2002			
HELLER EHRMAN WHITE & MCAULIFFE LLP 4250 EXECUTIVE SQ 7TH FLOOR LA JOLLA, CA 92037		EXAMINER WINTER, GENTLE E		
				ART UNIT
			DATE MAILED: 05/08/2002	,,

Please find below and/or attached an Office communication concerning this application or proceeding.

-	6	Application	n No.	Applicant(s)	
,`		09/678,61	9	MOTSENBOCKER, GREGG	
Office Actio	n Summary	Examiner		Art Unit	
		Gentle E. V		1746	
The MAILING DAT	TE of this communication app	ears on the	cover sheet with the co	orrespondence address	_
THE MAILING DATE OF - Extensions of time may be avail after SIX (6) MONTHS from the - If the period for reply specified a - If NO period for reply is specifier - Failure to reply within the set or	TORY PERIOD FOR REPLY THIS COMMUNICATION. able under the provisions of 37 CFR 1.13 mailing date of this communication. above is less than thirty (30) days, a reply d above, the maximum statutory period wextended period for reply will, by statute, later than three months after the mailing See 37 CFR 1.704(b).	36(a). In no every within the statuvill apply and will, cause the appl	nt, however, may a reply be tim tory minimum of thirty (30) days l expire SIX (6) MONTHS from t cation to become ABANDONEC	ely filed will be considered timely. he mailing date of this communication.	
_	mmunication(s) filed on <u>08</u> A	April 2002	,		
2a) ☐ This action is FIN	` ′ ′		non final		
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	ation is in condition for allowa ance with the practice under <i>l</i>	Ex parte Qu	iayle, 1935 C.D. 11, 4	53 O.G. 213.	
<u> </u>	re pending in the application.	ı .			
	laim(s) is/are withdraw		sideration.		
5) Claim(s) is/					
6)⊠ Claim(s) <u>1-58</u> is/ar					
7) Claim(s) is/	•				
	e subject to restriction and/or	r election re	quirement.		
Application Papers	•				
9)⊠ The specification is	objected to by the Examiner	r.			
10) The drawing(s) filed	d on is/are: a)□ accep	oted or b)	objected to by the Exan	niner.	
Applicant may not	request that any objection to the	e drawing(s)	be held in abeyance. Se	e 37 CFR 1.85(a).	
11) The proposed draw	ing correction filed on	_is: a) <u> </u>	proved b) disapprov	ed by the Examiner.	
If approved, correct	ted drawings are required in rep	oly to this Off	ice action.		
12)☐ The oath or declara	tion is objected to by the Exa	aminer.			
Priority under 35 U.S.C. §§	119 and 120				
13) Acknowledgment i	s made of a claim for foreign	priority und	der 35 U.S.C. § 119(a)	-(d) or (f).	
a)□ All b)□ Some	* c)☐ None of:				
 Certified cop 	pies of the priority documents	s have beer	received.		
2. ☐ Certified cop	pies of the priority documents	s have beer	received in Application	n No	
applicati	e certified copies of the priori on from the International Bur tailed Office action for a list o	reau (PCT I	Rule 17.2(a)).	_	
	made of a claim for domestic		·		ı).
_a)	of the foreign language proving the foreign language proving made of a claim for domestic	visional app	olication has been rece	ived.	-
Attachment(s)		- F		entreerwit the tr	
Notice of References Cited (F2) Notice of Draftsperson's Pater Information Disclosure Stater	ent Drawing Review (PTO-948)	and 10 .		PTO-413) Paper No(s) atent Application (PTO-152)	

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DETAILED ACTION

1. The use of numerous trademarks has been noted in this application. They should be <u>capitalized</u> wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 3. Claim 51 and 52 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the specification apparently fails to teach what constitutes a formulation that is specifically formulated to remove the enumerated stains. The specification does appear to make reference to certain chemicals that exhibit effectiveness in removing certain stains but apparently fails to teach an enabling composition.
- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 6. The use of the expression "exempt VOC" in claim 1 and subsequent claims lacks sufficient specificity (see page 7, line 6 et seq.). It is not clear if this is intended to be a standard

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based on a regulation (thus indefinite because the meaning of the regulation may change over time) or if Applicant only intends to identify a class of organic chemicals. If the latter is intended, either a "laundry list" approach, whereby the intended compounds are listed, or a description based on a physical characteristics would seemingly be required to provide the statutory mandated definiteness.

- 7. Further it is not clear, from the specification what is within the purview of "participates in atmospheric photochemical reactions". Especially since the list from which the language is presumably drawn, is (and likely will continue to be) periodically amended to include new species or potentially remove species.
- 8. Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the term "low VOC" in claim 41 is a relative term which renders the claim indefinite. The term "low VOC" is not defined by the claim, the specification does not apparently provide an adequate standard for ascertaining the requisite degree of certainty, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Specification

9. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code (page 35 line 22). See MPEP §608.01.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

- 10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - A person shall be entitled to a patent unless -
 - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 1-10, 12-15, 26-28, 36-39, 41, 42, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 4,306,989 to Motsenbocker ('989). With respect to claim 1, '989 teaches a composition comprising a first solvent, wherein the first solvent is able

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to is able to remove adherent deposits from surfaces and substrates, and a carrier solvent that is an exempt VOC, or a non-VOC. Please note that "exempt VOC" has been construed to defined by the species (or their functional equivalents) as identified in the specification.

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In accordance with this invention, a liquid composition is made up with a plurality of ingredients which 15 exert mutually synergistic effects on adhesives and adhesive-backed labels. The ingredients include a first solvent, often having a high inherent volatility, that is selected for its property of being a good solvent for adhesives, and a carrier. The carrier is selected for a lower inherent volatility, so that the flammability of the total mixture is significantly reduced, for its "staying" power to remain without evaporation for a considerable time, and for its ability to dissolve the adhesive, or to hold in solution or suspension that which has been softened or dissolved by the first solvent. Advantageously, a second solvent can also be used. Preferably the first solvent is an aromatic, and the second solvent is a halogenated hydrocarbon solvent.

With respect to claim 2, '989 discloses that the solvent (xylene) is within the range 0.1% to about 50% wt% and the exempt VOC or non-VOC (water) is about 50-99 wt%.

		3		
		Preferred Percentages	Range of Sultable Percentages	65
X	/lene	15	5 to 30	
tr	ichloroethylene	0	0 to 30	
		4		
		-continued		
		Preferred Percentages	Range of Suitable Percentages	
5	kerosene	50	0 to 70	
•	water	27	20 to 55	
	surfactants	6	2 to 15	
	butyicellosolve	2	0 to 2	

Claims 5 and 6, disclose that the carrier solvent is a petroleum distillate.

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Petroleum distillates are excellent for the carrier, especially kerosene. However, petroleum distillates in boiling ranges from naphtha to and even including diesel fuel can function with varying degrees of effectiveness. Naphtha appears to be next preferred to kerosene. ²⁰

Claim 7 is directed toward an embodiment where the carrier solvent is water.

ness. Naphtha appears to be next preferred to kerosene. 20 Also, when the compositions are to be emulsified, water can be used as a carrier.

Claims 8, 9, and 10 are anticipated by the table provided at claim 2. The additive could be trichloroethylene, a halogenated hydrocarbon solvent.

Claim 12 is anticipated by the reference to the addition of surfactants as a means to assist in the cleaning of the surface. Similarly claim 13 is anticipated by the reference to ethanol.

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Surfactants can be provided to assist in the cleaning of the surface and to aid in suspension and emulsification. Suitable examples are TritonX-100 and TritonX-114, sold by Rohm & Haas, Sorbitan esters, or nonyl phenoxy polyethoxy ethanol.

Claim 14 is anticipated by the reference to desirability of adding a fragrance (in this case lemon oil).

nated entirely, or substituted in part for xylene. Some or no mineral oil, and some or no lemon oil may be used. Surfactants can be added in small amounts if desired.

Mineral oil can be added in small amounts. It serves 40

Regarding claim 15, '989 discloses a first solvent (xylene) in the range 0.1-50 wt% and a carrier (water) in the range 10-99 wt% and a second solvent (trichloroethylene) in the range 0 to 20 wt%.

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	Preferred Percentages	Range of Suitable Percentages
xylene	15	5 to 30
trichloroethylene	0	0 to 30
	4	
	-continued	
	Preferred Percentages	Range of Suitable Percentages
s kerosene	50	0 to 70
water	27	20 to 55
surfactants	6	2 to 15
butylcellosolve	2	0 to 2

Claims 26-28 are anticipated by the table shown at claim 15. Specifically the aggregation of water and surfactants is contemplated to be at up to 70% of the total composition.

Claim 36 is anticipated by '989, see specifically the table at claim 15 (above) and the reference to the use of mineral oil:

Mineral oil can be added in small amounts. It serves surprisingly well to render removed, undissolved adhesives non-sticking so they can readily be wiped off. It

Claim 37 is anticipated in light of the rejection as set forth in claim 36, and the reference to the range of petroleum distillates.

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Petroleum distillates are excellent for the carrier, especially kerosene. However, petroleum distillates in boiling ranges from naphtha to and even including diesel fuel can function with varying degrees of effectiveness. Naphtha appears to be next preferred to kerosene. Also, when the compositions are to be emulsified, water can be used as a carrier.

Claim 38, is inherently taught throughout, and is assumed to be implicit in all the foregoing claims. In the absence of a physical removal step there may be substantive 35 U.S.C. 101 issues

relating to the utility of the instant composition(s) and method(s). Applicant is *strongly* encouraged to delete this claim and/or include this step in the independent claim from which this claim depends and/or provide some supported showing of why the instant composition and method has utility, absent this step. That said, '989 appears to teach the physical removal explicitly in:

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The terms "softening" and "dissolving" are used in their broadest sense. The adhesives of concern need not go into a clear solution in order to be released. The interaction of this composition with it tends to make it somewhat softer, and sufficiently less adherent, that the label, strip, or other material readily comes loose, generally with the layer of adhesive still on it. For this reason, the term "release" is used to describe the operation of the composition.

Referring to claim 39, and 47 wiping is disclosed in the '989 patent.

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Mineral oil can be added in small amounts. It serves surprisingly well to render removed, undissolved adhesives non-sticking so they can readily be wiped off. It also tends to leave a smooth clean surface after removal of adhesives to which surface a new label will readily adhere.

Claim 41 is anticipated by '989 as set forth in the rejection of claims 15 and 39, i.e. a method of releasing adherent materials from a surface by applying a low VOC composition to the materials and removing the released deposits materials.

Claim 42 is anticipated '989, which teaches all the limitations of claim 41 and discloses a first solvent and a second exempt/non-VOC.

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In accordance with this invention, a liquid composition is made up with a plurality of ingredients which 15 exert mutually synergistic effects on adhesives and adhesive-backed labels. The ingredients include a first solvent, often having a high inherent volatility, that is selected for its property of being a good solvent for adhesives, and a carrier. The carrier is selected for a lower inherent volatility, so that the flammability of the total mixture is significantly reduced, for its "staying" power to remain without evaporation for a considerable time, and for its ability to dissolve the adhesive, or to hold in solution or suspension that which has been softened or dissolved by the first solvent. Advantageously, a second solvent can also be used. Preferably the first solvent is an aromatic, and the second solvent is a halogenated hydrocarbon solvent.

Claim 47 is anticipated by the reference to wiping above (claim 39) and the fact that wiping is not always required.

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It is yet another object of the invention to provide a composition which is quick-acting on labels, so that

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very soon after application to a label, the label is penetrated, the adhesive softened, and the label with the adhesive can be lifted cleanly with a blade, leaving behind a surface which does not require wiping or further treatment to be clean enough for sale, and for the reception of another gummed label. It is useful to re-

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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13. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 4,260,510 ('510) to Hey et al. Methyal is also known as formaldehyde dimethyl acetal as such, claim 4 is a subsumed by claim 3, and that which properly anticipates claim 4 also anticipates claim 3. Claim 4 is anticipated by the disclosure of the '510 patent, which discloses a cleaning composition comprising a first solvent (methylal), wherein the first solvent is able to remove adherent deposits from surfaces and substrates, and a carrier solvent that is an exempt VOC, or a non-VOC solvent (1,1,2-1,1,2-trichloro-1,2,2-trifluoroethane). (It is noted that the order of solvents is reversed i.e. primary v. secondary, this is not considered to be relevant since the composition is claimed)

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als. Such mixtures often comprise 1,1,2-trichloro-1,2,2- 10 trifluoroethane as a primary solvent and a cosolvent. The latter may be selected from a very large number of solvents including by way of example, methylene chloride, acetonitrile, methyl acetate, methylal, acetone, 1,1-dichloroethane, trans-dichloroethylene and lower 15 aliphatic alcohols, for example, ethanol.

Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. Claim 11, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over '989 in view of United States Patent No. 6,342,471 to Jackson, further in view of United States Patent No. 4,421,665 to Lloyd et al. ('665). With respect to claim 11, pursuant to the arguments set forth above, the '989 does not explicitly disclose the use of n-propyl bromide (nPB) as a cleaner. However the application of nPB is well known in the cleaning arts. Further, it is known that nPB, has relatively low ozone depletion potentials (ODPs) (as is indicated in Applicant's

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admitted prior art). Notable, is the fact that it is known that the ODP of cleaners is reduced when nPB is included in the final cleaner formulation.

It has been found that brominated solvents, and most preferably nPB, have excellent characteristics for use as an electrical contact cleaner. Specifically, these brominated 45 solvents have been found to have good solveney and little to no flammability. In addition, the solvents have been found to have low ozone depletion potentials (ODPs). As will be recognized by those skilled in the art, the lower the value of the ODP, the lower the adverse effect on the stratospheric 50 ozone. To this end, it has been found that nPB has a low ODP, that is predicted to be about 0.002 to about 0.03 in a concentrated form. Most advantageously, the ODP of the cleaner is even lower when the nPB is in the final cleaner formulation.

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In light of the Applicant's statement that it is desirable to reduce the emission of ODCs (as well as the intuitive obviousness of such a desirability), and the explicit teaching in '471 the artisan, would have been motivated to combine the teachings of the references to achieve the claimed invention, i.e. cleaning solution having reduced ODP concentrations. Additional motivation exists because an artisan would have been motivated to create an effective cleaner that complies with regulatory emission standards. It is noted that VOC and ODP are used synonymously, at least to the extent that they relate to regulatory compliance concerning emission standards.

With respect to claims 43 and 44, following the reasoning as set forth regarding claims 15 and 24, each and every element of claim 43 is set forth in the '989 patent and '510 patent, except that both fail to explicitly teach the use of octylphenoxypolyethoxyethanol. This is a common and widely used surfactant marketed inter alia under the Tradname Triton-X® and is a widely used. See column 5 of '665:

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The composition of the invention may furthermore comprise a surfactant. This surfactant will be present in an amount of about 0.001-10% by weight. An example of such a surfactant is octylphenoxypolyethoxyethanol. The surfactant may also be various salts of fatty acids or the like.

Since surfactants are commonly used in cleaners, as wetting agents, the artisan would have been motivated to add a wetting agent to the solution to make the cleaner more effective, and may have selected this particular surfactant because it may have anti-microbial properties.

Claim Rejections - 35 USC § 103

- 16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 17. Claims 16, 17, 18, 19, 20, 21, 22, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over '989 in view of '510. Following the reasoning as set forth regarding claim 15, each and every element of claim 16 and 17 is set forth in the '989 patent, except that '989 fails to explicitly teach that methylal can be used as a first solvent. The '510 patent teaches that it is well known that azeotropic mixtures of solvents or mixtures approximating thereto can be employed as cleaning liquids especially for the removal of contaminants from synthetic organic polymers or plastic materials. Such mixtures often comprise 1,1,2-trichloro-1,2,2-trifluoroethane as a primary solvent and a co-solvent. The latter may be selected from a very large number of solvents including by way of example...methylal...and lower aliphatic alcohols, for example, ethanol. The artisan would have been motivated to make the instant combination because such a combination would result in a cleaning solution that is useful for the removal of contaminants from synthetic organic polymers or plastic materials.

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It is well known that azeotropic mixtures of solvents or mixtures approximating thereto can be employed as cleaning liquids especially for the removal of contaminants from synthetic organic polymers or plastic materials. Such mixtures often comprise 1,1,2-trichloro-1,2,2-10 trifluoroethane as a primary solvent and a cosolvent. The latter may be selected from a very large number of solvents including by way of example, methylene chloride, acetonitrile, methyl acetate, methylal, acetone, 1,1-dichloroethane, trans-dichloroethylene and lower 15 aliphatic alcohols, for example, ethanol.

With specific reference to claims 18, 19, 21-23, and 24 there is nothing in the specification suggesting the instant combination (of claim 18) produces unexpected results. Rather, the instant application appears to contemplate a wide range of compositions and list this as a mere example. The prior art appears to contemplate a variety of ranges and while the exact proportions claimed are not disclosed it would have been obvious to adjust the mixtures in any number of ways based of economic considerations, personal taste, or non-inventive, routine optimization. See SAE Technical Paper 1999-01-1501, which on page 9-11 discloses a solution comprising methylal (5%) petroleum distillate (93%) and MeOH (less than 7%) and water. The desirability of using a fragrance to cover disagreeable odors, is part of the Applicant's admitted prior art and is disclosed in the '510 patent. It should be noted that the recitation of a range that includes "0" as an endpoint is properly anticipated by a reference that does not include such a component. See also United States Patent No. 5,750,488 to Haskell et al. disclosing the interchangeability of MeOH and EtOH in cleaning systems:

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The fluorinated chemical constitutes roughly at least about 75% of the weight of the entire composition, and the acetal component constitutes no more than about 20% of the entire composition. More preferably, the fluorinated chemical constitutes about 80-90% of the entire composition, and the acetal constitutes about 5-12% of the composition.

The cleaning composition of the invention may also, and preferably does contain ingredients in addition to the flu-

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orinated chemical and the acetal. Alcoh is, aldehydes, ketones and hydrocarbons are exemplary optional components for the composition of the invention. When present, these flammable components are preferably lower boiling than the fluorinated chemical.

Alcohols suitable for inclusion in the inventive composition include methanol, ethanol, n-propanol, isopropanol, butanol, sec-butanol, tert-butanol and isobutanol. Aldehydes

18. Claims 29-37, 40, 43, 45, 46, and 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5,750,488 to Haskell et al. ('488) in view of '989. Following the reasoning as set forth regarding claim 15, the claim is essentially anticipated except that the '989 may fail to explicitly teach the composition uses less than 3% by weight VOC. Applicant has apparently merely described the routine variation in components, which would fall within the ambit of what 35 U.S.C. contemplates. That said, the Haskell discloses a multi-component cleaning solution:

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methylal. Another preferred solvent composition of the invention consists of about 80–90 weight percent perfluoro-N-methylmorpholine, about 5–12 weight percent methylal and about 1–10 weight percent of C_5 – C_9 hydrocarbon.

A further preferred solvent composition of the invention consists of about 40-50 weight percent perfluoro-N-methylmorpholine, about 30-50 weight percent 1,1.1.2.3,4, 50 4.5.5.5-decafluoropentane and about 5-12 weight percent methylal. Optionally, the further preferred solvent composition contains about 1-10 weight percent methanol.

The solvent appears to teach the components contemplated by the applicant. Since the solvent is specifically designed for low VOC emissions, an artisan would have considered this a meaningful reference and would have been motivated to make the instant combination in the interest of making a functional, environmentally friendly solvent. With specific regard to claims 36 and 37 see column 4, lines 18-20 of the '488 patent. The recitation of the alternative order of

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steps is inherently taught and further is an obvious variation, which would naturally occur as the artisan would have tried different materials for stain removal efficacy.

19. Claims 25, 48, 56, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over '989 in view of '510 further in view of United States Patent No. 4,421,665 to Lloyd et al. ('665). Following the reasoning as set forth regarding claims 15 and 24, each and every element of claim 56 is set forth in the '989 patent and '510 patent, except that both fail to explicitly teach the use of octylphenoxypolyethoxyethanol. This is a common and widely used surfactant marketed *inter alia* under the Tradname Triton-X® and is a widely used. See column 5 of '665:

The composition of the invention may furthermore comprise a surfactant. This surfactant will be present in an amount of about 0.001-10% by weight. An example of such a surfactant is octylphenoxypolyethoxyethanol. The surfactant may also be various salts of fatty acids or the like.

Since surfactants are commonly used in cleaners, as wetting agents, the artisan would have been motivated to add a wetting agent to the solution to make the cleaner more effective, and may have selected this particular surfactant because it may have anti-microbial properties. Removing with a stream of water would inherently occur if the cleaner was applied to an object (such as an automobile) and were removed. In a larger sense the direction of a steam of water at loosened particulate was practiced since ancient times. See Smithsonian Magazine, August 1999, Turning Water to Gold. The artisan would have been motivated to use a stream of water to remove the loosened particles because it is an inexpensive and generally effective method of moving particulate matter.

Conclusion

20. Applicant is cordially thanked for a thorough search of the prior art. The prior art cited by Applicant is considered highly relevant and the vast majority of the cited references are considered to anticipate or render obvious one or more of the claims. None of the claims in their present form appear to be distinguishable over the prior art of record. This Office action does not make reference to needlessly cumulative references. In the interests of advancing the

application to issue Applicant is respectfully encouraged to carefully consider the prior art of record when amending the claims.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gentle E. Winter whose telephone number is (703) 305-3403. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (703) 308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gentle E. Winter Examiner Art Unit 1746

May 3, 2002

RANDY GULAKOWSKI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700